Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the applications.

Listing of Claims

1-10 (Canceled) 5

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11. (New) A valve, comprising:

a fluid channel plate with a top surface and a bottom surface with two or more inlet ports and one or more outlet ports connecting the surfaces;

a membrane plate with a top surface and a bottom surface wherein the bottom surface is attached to the top surface of the fluid channel plate, whereby the membrane plate including a displaceable membrane portion can selectively obstruct one or more of said inlet ports of said fluid channel plate; and

means for proportionately actuating the displaceable membrane portion attached to the top surface of the membrane plate;

wherein the ratio of the sum of the periphery of the inlet ports to the square root of the sum of the areas of the inlet ports is greater than four.

12. (New) A method for maximizing the flow while minimizing the inlet pressure of a valve with two or more inlet ports wherein the ratio of the sum of the periphery of the inlet ports to the square root of the sum of the areas of the inlet ports is greater than four,

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comprising the steps:

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selecting the fluid, and

selecting the wetted materials, and

selecting operating values for six variables from a list comprising:

flow, temperature, inlet pressure, outlet pressure, area enclosed by the inlet ports,

periphery length of the inlet ports, and separation between the displaceable membrane

and the top surface of the inlet ports at full scale flow; and

calculating the value of the seventh variable by using a High Flow

Periphery Algorithm.

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